

**Notice of Allowability**

Application No.

10/766,017

Applicant(s)

MOTOYAMA, KOJI

Examiner

THUAN T. NGUYEN

Art Unit

2618

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 1-12 are allowed.

### ***Reasons for Allowance***

2. The following is an examiner's statement of reasons for allowance:

The closest prior art of record to Nishina (EP 1096667 A1) and Nakamura et al (US Patent 6,832,071 B1) fails to teach or suggest a low noise block down converter with the circuit arrangement as cited in claims 1 and 7 comprising a signal reception unit, a local oscillator circuit, a frequency converter, an output port for outputting a first IF signal through the frequency converter, and a power supply coupled to the local oscillator circuit and the first signal reception unit including a first voltage regulator for supplying a first DC voltage to the high potential node of the local oscillator and a second voltage regulator for supplying a second DC voltage to signal reception unit while receiving a potential at the low potential node of the local oscillator. Nishina teaches a totally different approach in having more than one oscillator and more than two voltage regulators for the four tuning circuits and four input/output terminals (refer to Figs. 2, 4, and 7) and the DC voltage does not need to provide to either a high potential node or a low potential node as taught by this present invention because the distribution of consumption current is equal among the four terminals (Abstract). Nakamura shows a similar circuitry of a LNB; however, each voltage regulator of Nakamura's LNB is for each amplifier (Fig. 5) and the circuitry of Nakamura somehow is more complex because of a plurality of inputs/outputs, and Nakamura is also silent of having a power circuitry with two voltage

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regulators performed for supplying a first DC voltage to the high potential node of the local oscillator and a second voltage regulator for supplying a second DC voltage to signal reception unit while receiving a potential at the low potential node of the local oscillator as noted earlier.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ben-Efraim et al, Davis et al, and Muterspaugh (PTO-892 attached) disclose systems related to LNB and voltage regulating methods with different approaches.

4. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to the New Central Fax number:**

(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,

Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

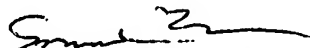
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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tony T. Nguyen  
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April 12, 2006

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600